U. S. DEPARTMENT OF AGRICULTURE.

THE

SOILS AND PRODUCTS

OF

SOUTHWESTERN LOUISIANA,

INCLUDING THE PARISHES OF

SAINT LANDRY, LA FAYETTE, VERMILION, SAINT MARTIN'S, IBERIA, AND SAINT MARY'S.

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Names.	Pronunciation.	Names.	Pronunciation.
Attakapas	At-tak'a paw.	Cheniere au Tigre	Shen' eer-o Teeg'.
Atchafalaya	At-chaf'a lyre'.	Charenton	Shar'-arn-taun.
Au Large	O Largyhé.	Fordoche	For-dosh.
Brashear	Bra-sheer'.	Fausse Pointe	Fawse Point'.
Bœuf	Burf.	Mermentau	Mair'-men-tow.
Bayou	By-you.	Nez Pique	Na-pe-ka'.
Brulé	Broo-la.	Petite Anse	Pet'-it Awnse.
Courtableau	Kore-tar-blo.	Portage	Por-taghe.
Cote Blanche	Kote Blarnsh.	Peigneur	Pain-yur.
Cypremort	Sip-re-more.	Queue Tortue	Ker'-tor'-too.
Cote Gelée	Kote-zher'-la.	Teche	Tash.
Caraucro	Kar'-arn-kro.		

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Hon. GEORGE B. LORING,
Commissioner of Agriculture:

SIR: In accordance with your instructions dated March 5, 1884, I proceeded without delay to New Orleans, remained there four days, and learned that a large portion of the section of country that I was to report on was owned by residents of that city, who gave me information in reference to crops, manner of cultivating; also what direction to take, mode of conveyance, &c.; for it is no easy matter for a stranger to find his way from one town to another, owing to the fact that there is but little fencing in some places and public roads are not very distinctly marked. From New Orleans I went to New Iberia, from there in carriage to Orange Island. I will here state, that the floods that have been doing so much damage to the principal river emptying into the Mississippi have not reached here yet (March 12). I have made arrangements to have all the grass seed sent on for experimental purposes put in with care, and so protected that I shall get a full and accurate report of the results next season. A portion of it was sown on Orange Island, on a piece of land nicely prepared for it. I find great prejudice against the Johnson grass. A reply to my question regarding it was as follows:

"That it is a curse to any agricultural country, and it has been found impossible to eradicate it. A section of the country where it has been introduced has been rendered valueless for agricultural purposes. No means of cultivation or rotation of crops can kill it; and, finally, fields where it has once taken root have to be abandoned or given over to the grazing of live stock. At best it is very coarse grass, and we have many better substitutes."

Louisiana has a coast line of 1,256 miles, bordering on the Gulf of Mexico, and extending from latitude 28° 59′ to 33° north, and longitude 88° 41′ to 94° 10′ west. The area in square miles is 41,346. It is divided into parishes, fifty-seven in number (generally called counties in other States). Six will be considered in this report, viz., Saint Landry, Saint Mary's, Saint Martin's, Iberia, Vermilion, and La Fayette.

The general surface of the State is low, having a very slight elevation above the sea-level. There are many swamps of great size, which occupy most of the delta of the Mississippi.

In the southern part of the State and west of the Mississippi are vast prairies, with but slight elevation. On the coast are found many large salt marshes.

This State was first explored by La Salle in 1682, who took possession of it with the usual form, and gave it the name of Louisiana. It was settled by the French in December, 1699, by Iberville, who founded a colony at Biloxi, which is now in Mississippi. The first permanent settlement, which still remains within this State, was New Orleans, in 1718. The French remained the owners of it until they ceded it to Spain, in 1762. It was in turn retroceded to France, and sold to the United States in 1803 for $15,000,000. It then included all the territory west of the Mississippi River not under the Spanish Government.

The most accurate information in reference to the location and distances of the towns, rivers, lakes, bayous, and railroads is found in Dennett's general description of Southwestern Louisiana.

Seventy-three miles west of the city of New Orleans the Morgan, Louisiana and Texas Railroad crosses the Bayou Bœuf, the eastern boundary of the parish of Saint Mary's, and several miles farther west is Brashear City, on Berwick's Bay. About 110 miles west of Berwick's Bay is the mouth of the river Mermentau, which receives the waters of the Nez Pique, through the Upper Mermentau, Lake Arthur, and Lake Mermentau. The river and lakes form the western boundary of the parishes of Saint Landry and Vermilion. From the northern boundary of Saint Landry to the Gulf coast the distance is about 100 miles, and from Belle River, the eastern line of the parish of Iberia, to Lake Arthur, the western limit of the parish of Vermilion, the distance is about 80 miles. The southern boundary of these parishes is in latitude 29½°—almost half a degree south of the latitude of New Orleans. The northern limit of Saint Landry reaches latitude thirty-one, near the true cotton belt of the Southern States. The five parishes, Saint Mary's, Iberia, Vermilion, Saint Martin's, and La Fayette, were originally called Attakapas, and are now called Attakapas parishes. The name was taken from one of the Indian tribes that inhabited this country.

All trees here grow to an enormous size. I measured a live-oak stump which was 9 feet in diameter. Cypress furnishes the lumber for the country. Being light and durable, when pressed and polished it makes very rich trimmings, and, in fact, nearly all the finer classes of houses are finished with it.

The trees are all draped with moss, which grows in great abundance, and forms one of the industries of this country, and really makes the laboring man independent; for a man with ordinary industry can easily earn from $1.50 to $2.50 per day gathering and preparing it for sale. The market appears to be as certain as our wheat market. There are

dealers along the railroad always ready to take it at quotation price, and ship it to the manufacturers. It is principally used in making mattresses, which are sometimes sold, or, at least, bought, for hair mattresses. I was very forcibly struck with the idea that this moss business could be worked on a much larger scale. The quantity is almost inexhaustible. The cypress swamps are so heavily covered with it that in many cases the heavy limbs of the trees are broken off by its immense weight, and there it lies in absolute waste. There is a constant demand at a remunerative price, and the material is free to any one who wishes to gather it. You can reach by boat all those cypress swamps, gather and take off the material with much less expense and trouble than you could cart it over dry land. I think it only a question of time when a little more attention will be paid to this branch of industry.

SOIL.

The prairie and all the level lands I visited in this locality are of alluvial origin, with a surface soil of from 3 to 4 feet of almost inexhaustible fertility, formed and kept up by the annual decay of vegetable matter and overflows from higher altitudes. Some of this land will produce four crops of hay a year. I allude to Bermuda grass, which makes the best hay that is made in this section. A slight variation is found in the subsoil. Mr. Jefferson informed me that he dug through clay at a depth of 2 feet from the surface in sinking his wells on the prairies, to be worked by windmills. In this vast prairie, containing three or four millions acres, there is a series of islands that are not surrounded by large and distinct rivers, but by bayous, which are simply little streams that drain them and part of the adjacent prairie. On these islands the soil is good and easy to cultivate, but of course not so rich or so deep as that of the prairies. As a general rule the soil runs as follows: first, rich vegetable mold from 4 to 6 inches deep, next loam, then sand, and lastly clay. So far as the soil is concerned I know of nothing that could not be raised here, except timothy and some small fruits that fail in midsummer if the season be dry.

Although the prairies are wet during the winter and spring months, you never find them sour or boggy, and the sweet, nutritious grass never ceases to grow, and I have noticed the cattle foraging when the surface was covered with water. In going from place to place the residents drive right through the ponds and lakes after heavy rains in March in preference to going around them. No matter how deep they look to be, there is but little deviation from the level. The wheels hardly ever sink beyond the depth of 2 or 3 inches, even when wagons are loaded. The manner in which these prairie lands are drained is by open ditches cut to natural ponds, as they are termed by the natives, or to the bayous. It would be impossible to drain these soils by blind ditches. There is almost an endless variety of vegetables grown here, and the house gardens can be so planted to yield fresh vegetables of some kind

the year round. They all seem to grow to perfection, and yield abundantly. I will give more in detail of the list of vegetables, the yield and manner of cultivation, in my report of the different parishes. The people live largely upon sweet potatoes and yams, together with fish and game. It seemed to be the market gardens only that were stocked with any great variety of vegetables. It was a very agreeable sight to see how thoroughly these gardeners attended to their crops after noticing with what carelessness the farmers attended to their kitchen gardens.

Not much wheat is grown. The yield of straw is very heavy; the yield of grain generally light. They sow nothing but spring wheat.

Farmers turn their cattle on the grain fields, chiefly oats, about the middle of February and let them graze two or three weeks. This furnishes good pasture and does not seem to interfere with the yield. I failed to obtain the average yield, but in reply to my questions a farmer told me he expected to make at least forty bushels to the acre. The Texas or other rust-proof varieties are generally sown, because they are best adapted to the climate and less susceptible to rust and insects. Rye is seldom grown for the grain, but is sometimes sown in the fall for winter and spring pasturage. When grain is sown in the fall the land is thrown up in dead furrows; that is, throwing it up in beds about eighteen or twenty feet wide, with an open or dead furrow between, which holds the water during a wet season.

Corn is planted in rows or ridges, five and a half feet apart. They call them ridges because they are thrown up very high. These drain the top very thoroughly, and the crop is kept moist by the water remaining in the furrows until the season is pretty well advanced. All the fields I noticed seem to be only one way; I mean they are not cross-plowed, as I have generally seen corn worked. The corn when gathered is housed in the shuck.

CATTLE RAISING.

One of the principal industries of this locality is raising cattle for the butcher, and very little attention is paid to growing fine stock for dairy purposes. I stopped for some time at the house of a gentleman who owns about three thousand cows, and the butter for his table came weekly by express from Philadelphia. Cattle grazing yields an enormous profit. Cows can be bought very cheap from the fact that there is so little demand for their meat; even the poorest class do not care to eat it. They can be bought from $12 to $18 per head, and calves will command from $7.50 to $9 in the pasture fields. The only way to account for this high price for calves is that veal seems to be the favorite meat. Fresh pork is seldom cooked. In fact I never saw any during my stay in that locality.

Cattle raising could be made more profitable than it is by dividing the prairies into smaller pasture fields and by cutting and curing thousands of tons of hay that go to waste, to be fed from the rack when the pasturage grows short. During at least nine months in the year the grass is

so strong and luxuriant that the cattle tramp down and destroy more than they consume. It has only recently been discovered that the sea marsh in this part of Louisiana affords as good pasturage as there is in the world, strong, nutritious grass grows in great abundance, resembling very much in taste and appearance what is known in the Middle States as red top, only a little taller and as thick as it can stand. From as near an estimate as I could make, if cut and cured, which could be easily done in the proper season, it would yield 5 tons of good hay per acre. There are thousands of acres of the sea-marsh that could be most profitably used by those owning the prairie or higher land adjoining it. I am writing from personal observation, having ridden over it on horseback in perfect safety. The only obstructions to guard against are muskrat holes, but for a pasture for at least six months in the year, without expenditure, it cannot be excelled. I see no reason to prevent them from using it longer, if they will build sheds to protect their cattle in midsummer. Some of the natives say that the mosquitoes would kill them in the spring season, but this I doubt, for there is always a strong Gulf breeze.

Deer are to be found here in great numbers, also wild cattle and hogs.

There is no danger from floods from the higher countries, for by inquiry from the oldest inhabitants, and these I could rely on for the most accurate information, there has been no overflow for twenty-three years, and then the water reached the depth of about 10 inches, by backing up from the Gulf of Mexico and meeting the floods from the higher lands, remaining but a short time and then flowing off rapidly. Even in cases of an overflow, there are spots elevated above the common level on which they can go for safety. During the winter season the marsh is covered with a heavy growth of the season previous, which makes very good hay, being perfectly clean, free from rust or mold, and we noticed our horses ate it whenever we gave them the opportunity. But the cattle seem to prefer the green spring growth which is just making its way through the root. It has a sweet with a very slight salty taste. I saw a lot of cattle that were turned on the marsh in December when they were there and in bad condition. They are now looking fine and healthy, and nine-tenths of them seal fat.

This sea-marsh land is very cheap, and yet it is better pasture, in winter especially, than the prairie lands that command ten times the price. The cattle-dealers who own sea-marsh and the adjoining highlands and prairie, have a great advantage over those in the Middle and Western States, for there is no need of fertilizer of any kind, no outlay for shelter, and very little need of fencing. If they fence at all, it is by sticking green willow poles. It seems to make little difference whether they be the main stock or branches. They immediately take root. On these they stretch the wire, with stakes driven down along the line to strengthen it. As the fencing is cheaply done, the older it gets the stronger it is. Those who use the sea-marsh as a cattle range

drive them off in the latter part of August. At this season the heavy spring and summer growth has fully matured and begins to dry, when it is burned, to be out of the way of the coming crop. This grows rapidly, and furnishes good pasture about the time the prairie shows the effect of midsummer, especially if the hot season be long and dry.

In the native cattle there can still be seen traces of the old Spanish breed, with enormously long and wide-spreading horns, narrow chests, high flanks, and deeply-sunken backbones. All the characteristics requisite for good breeding animals are absent. The stock-raisers say that these cattle are so thoroughly acclimated that it is a rare thing to see disease or sickness of any kind among them, and requiring so little attention, they look upon them as the most profitable. Past experience teaches them it is a mistake to import old cattle in order to improve the breed, for they invariably die off. The few that live after the first year have made these efforts to improve stock expensive and unprofitable. Some are now adopting a new method, and, I think, the right one, from what I saw. It is importing calves as soon as they are old enough to leave the cow. Some attention must be paid to them for the first season. They will then thrive and do as well as the native cattle.

I had the pleasure of seeing the finest lot of registered Holstein calves that I have ever seen. The owner says they are doing well and looking better than the herd from which he bought them in New York. They are about ten months old, and are as large as any of the Alderney cows on the plantation. This herd is on Mr. J. Jefferson's plantation. He also has a herd of about forty registered Short-horns, and some fine specimens of the Aberdeen Angus breed. He is very favorably impressed with the Holsteins and thinks they are *the* cattle for the country. His efforts will be of great value to the people in that locality.

The following list of fruits and vegetables is given by Dennett: Plums, figs, quince, pears, cherries, grapes, papaws, persimmons, pecans, hickory-nuts, walnuts, blackberries, dewberries, may-apples, mulberries, crab-apples, black and red haws, chincapins, strawberries, and some other fruits; nuts and other fruits of little importance thrive and mature well in these parishes. In Saint Mary's and along the coast to the Mermentau, oranges are raised yearly in great abundance, and the Mespilus or Japan plum, lemons, limes, bananas, and pineapples may be produced in the open air as high up as Franklin by giving them a little extra attention in the winter.

Turnips, cabbage, melons, and all the other garden vegetables grow as well in these parishes as they do north of the Ohio River.

The best winter gardens contain large white-head cabbage, rutabagas and flat turnips, onions, eschallots, garlic, mustard, roquette radishes, cauliflower, beets, cress, lettuce, parsley, leeks, English peas, celery, endive, &c. These thrive well in the garden all winter, except in very cold winters, where those farthest inland suffer a little from the frost. But this occurs so seldom that they have less fear than we have of the drought injuring our crops in the Middle States.

PARISH OF SAINT MARTIN'S.

The extreme length of the parish of Saint Martin's is 24 miles, and its width averages about 18. It contains about 400 square miles of rich prairie, swamps, lands heavily timbered, and tillable lands, covered with the finest body of timber in the State, suitable for sugar-wood, building purposes, cabinet, wagons, plows, and all kinds of wooden-ware. The parish is bounded on the north by Saint Landry, by La Fayette on the west, Iberia on the south, and Iberville on the east.

THE TECHE LANDS.

The Bayou Teche enters Saint Martin's at its junction with Bayou Fusilier at Amandville, formerly called Leonville, and, meandering through the parish, enters the parish of Iberia, 6 miles below the town of Saint Martinville, near Lake Tasse, 35 miles from Amandville.

The tillable land from Saint Martinville, east of the Teche, is 8 miles in width, including all the land between this bayou and Catahoula Lake. At Amandville the tillable land on the east side of the bayou is 3 miles in width. The average width of the tillable land on the east side of this bayou in its entire course through the parish is over 5 miles, and its average width on the west side of the Teche is 3 miles. In places in the great bends of the bayou will be found some of the largest sugar plantations in the State. In our estimation it is difficult to overrate either the beauty or the merits of this portion of Attakapas.

RICH SOIL.

The richness of the soil is proverbial, for it possesses all the qualities that are essential and desirable in any soil—drainage, ease of cultivation, its lasting fertility in the production of sugar, cotton, rice, corn, tobacco, indigo, or any other crops now grown or ever grown in the same latitude. Fruits, melons, potatoes, cabbages, turnips, and the whole list of field, garden, and orchard products can be realized. No portion of Louisiana can excel that of the valley of the Teche in the parish of Saint Martin's.

FORESTS.

From the open prairie which runs parallel with and near the Teche to the Atchafalaya, the eastern limits of Saint Martin's, it is almost an unbroken forest of the finest timber in Louisiana.

In the swamps of the Atchafalaya there are millions of cypress trees, tall, straight, and many of them from 3 to 4 feet in diameter. Between these swamps and the Teche prairie, on the tillable lands, there is an immense unbroken forest of oak, gum, hickory, black walnut, magnolia, live-oak, white, red, and other oaks, lime, pecan, sycamore, and other wild growths of less importance. On the west side of the Teche, in the

rear of the open prairie, extending from Bayou Fusilier and the Upper Vermilion, down Bayou Tortue to Lake Tasse there is a forest of swamps, cypress, and also of oak and gum, and other trees which grow on dry and tillable lands. Both banks of the Teche are skirted with fine forests.

THE VALE OF THE TECHE.

The lines of swelling forests in the rear take the place of hills in helping to form the valley of the Teche. This bayou, in its course through Saint Martin's, is extremely beautiful, in many respects more beautiful than the Lower Teche, as it meanders through Saint Mary's. Its first banks on both sides at Saint Martinville are nearly 20 feet high. The banks of the bayou have a slope of less than thirty degrees to the water's edge. Everywhere there are beautiful building sites along the bayou. The banks give the bayou everywhere the appearance of a high canal. The water is not more than 2½ or 3 feet deep in summer and autumn, and the surface is but 50 or 60 feet wide, but for about six months in the year it is navigable for small steamers. One lock at Saint Martinville would render the bayou navigable to the junction the year round.

THE FOREST OF THE TECHE.

The scenery all along on both banks of the Teche from Saint Martinville to the junction, a distance of 30 miles, is the most charming and magnificent we have ever seen in any part of the United States.

The forest trees on both banks, the magnolia, ash, live-oak, red, white, and other oaks, black walnut, lime, gum, pecan, hickory, sycamore, and other trees; all tall, graceful, and of generous growth. On thousands of acres the grass grows on a smooth surface under the noble branches of the magnificent trees. These lands are far more beautiful than the famous woodland pastures of Kentucky; the trees have a more luxuriant growth, the foliage is richer and hangs out in the broad branches in a more generous abundance. And the soil is rich beyond anything we saw in the great West. It is the cleanest looking country I have ever seen. The beautiful, smooth prairies look as though they had just been washed. The fat herds grazing upon these green expanses help in giving the finishing touch to this magnificent landscape scenery.

FRUITS.

Just here I will take occasion to say that peaches seem to thrive particularly well in this parish; yield certain, prolific, and of the finest flavor, and grow very large and perfect in shape. They are finer, and do not rot so soon after being picked as those grown farther north. They command a high price in the New Orleans market.

POULTRY.

Large flocks of poultry are found on the prairie, for in this warm climate very little shelter is needed for them, and they find plenty of

insects and grass-seed to keep them in good condition. They produce a bountiful supply of eggs, which are consequently very cheap. They sometimes sell as low as 5 cents per dozen, and never more than 10. Grown chickens sell from 20 to 25 cents a piece at the highest. They only eat them for a change of diet, for the very poorest class of people live on what we of the Middle Northern States term luxuries. All the bayous and lakes are full of the finest fish, such as trout, black bass, gar, sachylià, sunfish, gaspergo, and numerous others which I do not call to mind just at this moment, and on these same waters abound in great numbers canvas-back, redhead, mallard, bald-pate, blue and green wing teal, and summer ducks. Wild geese are on the lakes and sea-marsh the entire winter. All this is perfectly free. There are no ducking clubs or fishing monopolies here. Every one is at perfect liberty to fish and shoot. The best jack-snipe grounds in the world are found in the Teche country. To give an idea of the quantity of snipe, I was one of a party of three that killed fifty-three birds on a piece of ground, measured as accurately as we could by stepping, that was a little less than an acre. Then we did not kill half that flew up. Snipe feed here by the thousand. They also have plover, rail, prairie chickens, and quail in great abundance. I have seen gunners a little farther north tramping miles and miles to get a shot at birds found here feeding and jumping around seemingly in perfect security, for they are not molested here by the sportsmen. I allude to such birds as robins, doves, flickers, reed-birds, field-larks particularly, as they are very shy in the North. They do not fly away, but walk, and will let a person get within 10 feet of them. There are also a great many deer in this county, which generally frequent the sea-marsh. Opossum, coon, rabbit, and red squirrel are very numerous, but are seldom or never hunted. There is game always in season. When it is out for one kind, the other is coming, so that a sportsman is always in his glory.

I think what I have said in reference to the boundless supplies within the reach of every individual living in this section of the country speaks volumes in praise of the working-class; for, notwithstanding fish and game can be had for nothing, and that meat is raised at a very trifling cost, good labor can be had for $1 per day.

Though just beyond the limits of Saint Martin's, it may not be amiss to notice Amandville and its surroundings. Amandville is settled on a bluff at the junction of Teche and Fusilier, about 35 feet above low-water mark. The banks on each bayou are here very steep, and the scenery is wild and interesting. Here are plenty of fish and game. Forest trees hang over the banks of the bayous, and in places lock limbs and branches. The road leading north through Opelousas passes for miles through one of the most enchanting forests in the south. Queenly magnolias, with their wealth of green, glossy leaves and large white flowers, noble oaks, pecans, ash, gum, hickory, black walnut, and numerous other trees of rare beauty, spread their friendly branches above

you as you ride over a good road through this region of indescribable beauty. The trees of this forest grow to an exceptionally large size, a live oak measuring 5½ feet in diameter at the chopping place. Twenty feet from the roots it was 4 feet in diameter. Forty-eight feet at the first limb it was 3 feet in diameter, to the second limb 58 feet. A log could have been made of it 60 feet long, nearly 3 feet in diameter at the small end and 5½ feet at the large end.

LAKE MARTIN.

About 120 miles from New Orleans is a beautiful lake over a mile in length and little less than a mile wide, called Lake Martin. The soil around is firm and one may ride to its banks on all sides. Tall cypress and ash trees grow on the edge of the lake, but gum, oak, elm, and the small growth of the banks of the Teche make a magnificent shade in hot weather all around it. The soil is rich and well set in grass under the trees. Parties who seek pleasure come here on little excursion trips and spend a most enjoyable time through the summer and autumn months. And here is the finest place in the South for picnics, fishermen, and duck hunters. The lake is full of the best varieties of fish.

GRANDE POINTE.

Grand Pointe is situated above Breaux Bridge on the east bank of the bayou, and has a front on the bayou of about 15 miles in extent. It extends several miles back from the bayou. This settlement includes a great number of old creole families. They live in islands of timber and coves of prairie, and cultivate cotton, tobacco, corn, and sugar-cane. The country is beautiful and the land is rich. The people live in small, cheap houses. As a general thing they are industrious, civil, and apparently as content and happy as it is possible to be.

For general information, I will here state that the term "creole" does not refer to any particular class of people as is generally understood, but is a term very liberally used. It is used in describing live-stock, fowls, and even productions of the soil. The hotels have on their bill of fare "creole eggs," which simply means the eggs which were gathered in the State. The impression that the creoles have African or Indian blood in them is erroneous, for most of them are descendants of the French and Canadians. They keep up neighborhood balls every Saturday night. Balls are generally made up of the sons and daughters of the creole families, who work all day and dance all night. There are a great many musicians who are very glad to play for the enjoyment they have at the entertainment. The inhabitants of these towns and villages are very friendly with each other, and are but little troubled with the jealousies and quarrels which sometimes afflict neighborhoods. They are extremely sociable, and obtain a large amount of social enjoyment at a small expense.

The timber in Grande Pointe, about a distance of 4 miles back fro the Teche, is gum, pecan, oak, ash, elm, and hackberry. The land here looks dry and very fertile.

Coulées and ravines run into the timber-land farther back. The whole sheet of country drains well, and some of these ridges several miles back were out of the overflow in 1867.

THE NATURAL DITCHES.

The sheet of prairie on either side of the Teche is everywhere grooved with ravines, which extend many miles to the bayous and lakes. They are the natural ditches of this section. and take off all the surplus water. But now that those prairies are mostly under cultivation, forming some of the finest rice and sugar plantations of the south, the planters have expended immense sums of money in cutting artificial drains, that the waters may run off more rapidly. Many of those ditches, especially those on the dividing lines between plantations, are dug sufficiently deep to do away with the necessity of having a fence. Wherever ditches are seen, people may be seen catching fish. In fact, all the little streams that lead to the lakes abound in fish of some description. They even catch them out of the ditches along the railroad.

There is every inducement in this section to invite settlers or men of enterprise. The country is healthful. The climate is everything that could be wished; even in midsummer you enjoy the cool breeze from the gulf blowing constantly over the prairies, interrupted only by the salt sea-marsh, which is so slight that you enjoy it almost as much far inland as you would on the beach.

The soil is very rich, and produces bountiful crops of anything you plant in it, for I know of no vegetable but what will grow there.

New Orleans, New Iberia, Morgan City, and other thriving towns around furnish good markets where remunerative prices and ready sale can be had for all garden and farm products. It is good for mechanics and skilled workmen, especially wood-workers, for the very finest timber, both soft and hard wood, grows in great abundance in this country. The white-oak, hickory, and ash in this section are well adapted for building wagons and all sorts of agricultural implements, being straight, close-grained, very tough, and durable. Really, there is no reason why all the agricultural machinery which is used here should not be manufactured in this immediate neighborhood.

The strongest dredging machines which are built are made at Morgan City.

CROPS.

One of the Louisiana papers, speaking of this section in particular, says:

"More attention is paid to the cultivation of corn than cotton, but both crops flourish well and the yield is remunerative and satisfactory.

The soil everywhere is rich and easy of cultivation. It would be hard to overestimate the advantages the planters here have over those who grow sugar and cotton in the other States. They are great. They have no need of fertilizers, and the ground is so rich and mellow that it is very little labor to plow it and keep it clean."

Corn is a crop suitable to this country. All sorts of potatoes yield well and are of a very fine quality. The working class are industrious and well disposed. Pecans form an article of merchandise for this section and are probably more neglected than any other native product. They grow wild and are found much the same as we find the common hickory nut or black walnut through the Middle States. The largest and the finest flavored grow in this section. They command prices varying from $8 to $20 per barrel, and the yield from some of the trees here sounds almost incredible. There were two trees pointed out to me that the owner realized $62 from in the season of 1882. They are generally gathered in the month of October after the first frost. They are easily gathered and the outer shell taken off and barreled for market. It would be profitable if this branch of industry had a little more energy bestowed on it. It could easily be increased 500 per cent.

PARISH OF LA FAYETTE.

La Fayette is the smallest of the Attakapas parishes. Its extreme length is about 19 miles, and its width about the same. Its northeast boundary made by the bayous Carancro and Tortue is irregular, the other three lines are nearly straight. This parish has an area of about 300 square miles, nearly all of which is prairie land and generally cultivated in corn, cotton, cane, and rice by the larger planters; while other portions are cultivated in various crops, such as potatoes, cabbage, peas, and all sorts of garden truck.

SOIL.

The soil of La Fayette Parish is a light loam, and more sand is found mixed in it than any other. The average depth of the soil is about 12 inches. It rests on a clay subsoil and is like the soil in all the parishes in fertility. They are all rich in plant food, and the fertile properties of the subsoil are developed by exposure to the sun and mixing with the surface soils. There are fields in La Fayette which have been in cultivation for eighty years, principally in corn and cotton, and are producing abundant crops to-day. The only help they have ever had by way of fertilizing or manuring has been occasionally plowing under a crop of cow-peas. They use two-horse plows in breaking up their land and cultivate their crops with one. The land is so easily cultivated that they work their crops with great ease and rapidity. The prices of good farming lands to-day range from $8 to $30 an acre.

BEAU BASIN.

The road leading from Vermilion to Grand Coteau runs through a beautiful agricultural region called Beau Basin. It is 12 miles from Vermilion to Carancro Crossing and about 4 from the road to the eastern boundary of Beau Basin, which is the boundary of the parish.

The lands near Vermilionville are nearly level, but extremely productive. A few miles north, between the road and the bayous, the surface becomes beautifully rolling. The gentle slopes and long, tortuous ravines may be ranked with the most delightful landscape scenery in Attakapas. Here we find some of the most pleasant building sites in this enchanting country. The swells are like the heaving bosom of the ocean after a storm. Descending into the ravine, one feels as though he were in a trough of the sea, so to rise up again on the mountain wave and look out on the green ocean. The cottages of the farmers are neat and comfortable. The green pastures, fat cattle, and fine fields of cotton and corn in their proper season indicate a rich soil and a prosperous population. Shade trees and clumps of timber add greatly to the beauty of the scenery. The fields are generally inclosed with nice fencing and the lands are pretty well ditched. The country is airy, pleasant, and healthy. Between Vermilionville and New Iberia are situated Cote Gelée and Royville. The soil is rich, the country undulating, with deeper ravines and higher swells than we find in Beau Basin. The farmers are thrifty, but not as independent as they are in the north of Vermilionville. Plain dwelling-houses and groves of China trees may be seen in all directions. The scenery in places is quite picturesque. This is an open and airy country, with pleasant locations for residences, admirably drained, the soil rich, mixed with enough sand and vegetable loam to make it easy of cultivation. No portion of the South can be more healthful than this. The houses are very low and badly ventilated, the inhabitants paying but little attention to health, sometimes not even having windows. Still, all the people appear to be perfectly healthy and have very little use for the doctor.

A great deal of the land in the parish of La Fayette is now and has been changing hands. New enterprises and industries are gradually increasing.

VERMILION RIVER.

In mentioning this, I cannot do better than copy from Darby in his geographical observations:

"The two vast prairies known by the names of the Opelousas and the Attakapas extend themselves on each side of the Vermilion, through its whole traverse, from its entrance into Attakapas to its egress into the Gulf of Mexico, the distance of 100 miles.

"Wood is much more abundant on the Vermilion than along the west bank of the Teche, and though the soil may be inferior in fertility, it is nevertheless excellent, and the quantity greater on an equal extent of river.

"There are certainly 80 miles of the banks of the Vermilion which have an extension backwards 2 miles, affording 320 superficial miles, or 204,800 acres.

"Some of the most beautiful settlements yet made in Attakapas are upon this river. From the diversity in soil and elevation, there is no risk in giving the preference in beauty of appearance to the banks of the Vermilion over any other river in Louisiana south of Bayou Bœuf. If situations favorable to health, united with the most agreeable prospects, bounded but by the horizon, should be sought after; were taste to select sites for buildings, its research would here be requited and be gratified by the breezes which come direct from the Gulf of Mexico. Fancy itself could not form a more delightful range than the Carancro and Cote Gelée settlements. On leaving the dead level of the Teche or the almost flat extension of the Opelousas prairie, the eye is perfectly enchanted. If a bold extent of view can give vigor to the imagination, if the increase of the power of intellect bear any proportion to the sweep of the eye, upon one of the eminences ought a seat of learning be established. There the youthful valetudinarian of the North would, in the warm, soft, and vivifying air of the South, find his health restored and his soul enlarged. Astonishing as it may sound to many, I do not hesitate to pronounce this, together with the range of hills from Opelousas, as the most healthy and agreeable, near the alluvial land of Louisiana."

There are numerous churches of all denominations, with school-houses at convenient distances, and well attended.

CROPS AND FRUITS.

Cotton, corn, sugar, rice, and all of the field and garden crops of the other Attakapas parishes, do well here. Common Irish and sweet potatoes, melons, peaches, pumpkins, and field peas find a remarkably congenial soil. All the fruits of the other Attakapas parishes, except oranges and the more delicate kinds, thrive finely in La Fayette. Formerly indigo was profitably cultivated here.

POULTRY.

This is one of the best parishes in the State for all kinds of domestic fowls. Some families make a business of it.

GENERAL FACTS.

The bayou or river Vermilion is navigable 15 miles above the bridge on the New Iberia road and 75 miles below the bridge to Vermilion Bay. Large crops of sugar and cotton are raised in this parish.

The horses, hogs, cattle, and live stock generally are healthy in this section.

The only inconvenience or drawback of this section is the scarcity of

firewood. The principal source is the trimmings of the catalpa and china trees.

The average yield of corn, where properly cultivated, is from 50 to 60 bushels an acre.

Sweet potatoes, from two to three hundred bushels per acre.

There are a great many Western mules and horses used in this section, but there is no reason why they should find it profitable to buy them, for the native mules and horses are very good workers. They can endure great hardships and are raised at very little expense, good pasturage being abundant the entire year.

PARISH OF VERMILION.

GENERAL DESCRIPTION.

The parish of Vermilion contains about 1,600 square miles of land and water within its limits. About 600 hundred square miles of this is tillable woodland, prairie, and cypress swamps. About 500 square miles would include the prairie and 100 square miles the timber land, the smaller part of which is cypress swamps. Lakes, bays, and sea-marsh cover about 1,000 square miles of the surface of the parish.

About a quarter of the tillable land is on the east side of the Vermilion River or Bayou, and three quarters on the west side extending to Lake Arthur and the Mermentau River. The timber land is principally on the Vermilion River. extending on both sides from the La Fayette side nearly to Vermilion Bay.

The timber is narrow above Abbeville, but it becomes broad below this village, extending out a mile and a half on each side in places. As it approaches the bay it becomes narrower. Below Abbeville there is a creek on the west side of the river lined with a heavy body of timber. and there is another on the east side. A line of forest trees extends across the New Iberia and Abbeville road beyond the head of the creek. There is a line of cypress timber, on land a little higher than the prairie, at the edge of the sea-marsh north of Marsh Lake 12 miles long and three quarters of a mile wide, and there are islands of timber in the edge of the sea-marsh east of Vermilion River. There is also timber on the south side of Bayou Queue Tortue and on Pecan Island and Grand Cheniere River.

SOIL AND SCENERY.

The soil of this parish is a dark vegetable mold, with a large proportion of sand, from 8 to 12 inches deep. This rests on a subsoil of grayish clay.

The soil along the Vermilion River has a larger proportion of sand than that farther back; this gives the soil a lighter color. On account of the larger proportion of sand here than in the Teche lands these

fields are more easily cultivated, and the roads need but little working—in most instances none at all—to keep them good the year round. The bottom of the ponds and ditches are not boggy. One may pass over any of them on horseback without any inconvenience to the horse or rider. There are natural ponds in all these prairies, where the stock cattle are supplied with water. These ponds are from twenty to fifty yards in diameter.

Being forcibly struck with the convenience of those natural ponds, as they are called by the residents, I made inquiry as to whether they had been made for reservoirs for the purpose of holding a supply for the stock during the dry season. The only answer I received was, "they had no recollection of any of them being made by the hand of man." Prairie Gregg, which lies next to the sea-marsh southeast of Abbeville, is a beautiful sheet of land, level and rich, the soil darker than that east of Abbeville. The Gulf breezes sweep over it uninterrupted by forest trees. There are but few of the old inhabitants here who cultivate their lands to any extent, relying principally on fruits, poultry, and stock-raising, which yield them a revenue with which they seem to be perfectly satisfied.

THE PRAIRIE WEST OF THE VERMILION RIVER.

Viewed from an elevated position of the Queue Tortue, half way between the Vermilion and Lake Arthur, the scenery is the most perfect of its kind that fancy can describe. Facing the south, one may here turn to the right or to the left, and as far as the eye can reach there is one vast extent of natural meadow. Here and there may be seen a herd of cattle or horses, almost hidden in some places by the tall natural grass. The prairie east, west, and south is dotted with little groves of trees, which shade the cottages of the resident population, who live principally by hunting, fishing, and stock-raising.

FOREST TREES.

The dry-land timber is oak, ash, magnolia, gum, hickory, elm, beech, and hackberry. The usual dry-land timber, with the exception of chestnut, is present. The swamp growth is principally cypress.

CROPS.

The soil is good for sugar-cane, cotton, rice, potatoes, and all the products of the Attakapas parishes.

The yield of cotton is not as large per acre as in higher latitudes. The parish is peculiarly adapted to the cultivation of rice. It may become the leading rice parish in the State. Large yields of sugar have been grown in the parish; as large as 3,000 pounds have been produced; from 800 to 1,000 pounds of rice. The capacity of the soil is strong, but has been neglected on account of the great attention paid

to stock-raising. Oxen are generally used in breaking up new ground, and creole or native horses in cultivating it.

Oxen are not put to work until the grass rises in March, since but few of them are fed on hay or corn.

It is surprising to see so little attention paid to making hay, when it could be gathered in great abundance. Millions of tons are trampled under foot and go to waste, for the number of cattle that are raised in this section cannot consume the great quantity of grass in the growing season. Agriculture has received less attention here than in the other parishes.

Good well-water can be had in this section at a depth varying from 20 to 30 feet.

A large quantity of poultry and eggs are shipped to the New Orleans market from this section.

This parish abounds in wild game, such as duck, geese, brent, quail, wild hogs, prairie hen, and deer.

Vermilion Bay abounds in fish and oysters. The fresh-water lakes, ponds, and bayous have an abundance of fish.

ABBEVILLE.

The Vermilion River is navigable the entire length of this parish, and vessels ply between Abbeville and New Orleans, carrying the products of the surrounding parishes to the metropolis of the South.

Abbeville is beautifully situated, about thirty-five mile from the mouth of the river.

The population is slowly but steadily increasing.

MARSH LAKE.

Marsh Lake, in Vermilion Parish, is usually called White Lake. So seldom do the inhabitants penetrate this part of the marsh, that many people raised in the parish think there is no lake to be found. It is an unexplored region to the inhabitants.

ISLANDS.

Grand Cheniere, in the southwestern portion of the parish, is about 12 miles in length, and contains a population of thrifty farmers. The soil is rich, and tropical fruits, sugar, and sea-island cotton, tobacco, and all other products of Attakapas thrive well.

Pecan Island, situated in the sea marsh, 6 miles from the sea coast, in the southern part of the parish, is 16 miles in length. It is covered with live oak and pecan trees, and contains numerous hogs and cattle. It is pretty well populated, and obtains a handsome income from the live stock. This island, supposed to have been the resort of "Blue Beard" and his men, and other more modern pirates, has often been visited by parties in search of hidden treasures. Trees have been

chopped into in search of copper nails, to get the bearings of pots of money, and pits have been dug when the bearings have been agreed upon. There are many hundred bones buried here, supposed to be the bones of prisoners brought here by the Attakapas Indians, who were cannibals, to be stewed into chowder with clams. They are said to have been very fond of this dish.

Cheniere au Tigre is in the southeast part of the parish, in the sea marsh, near the southwest pass of Vermilion Bay. This is a famous stock-ranch. Here beeves, as in all other parishes near the coast, keep fat all the year round, and are ready for market in January and February. Not less than 6,000 head of cattle live in the marsh along the coast. Stock-owners live in small groves of timber, and on slight elevations of land, near the coast. Though the parish of Vermilion has been passed by or overlooked to a great extent by the traveling public, it has great merits, and these merits will before many years be understood. Its situation, away from all the great thoroughfares, through the Attakapas, has been the principal cause of its not having been more generally visited and better known. Strangers who come to Attakapas will do well to visit Vermilion Parish and decide upon its merits themselves.

It would be impossible for me to give a better description of Saint Mary's than that by Daniel Dennett, whose report I obtained through the kindness of my esteemed friend, Mr. Dudley Avery, of Salt Island. All that I find essential to add from my own observation is, that some of the large tracts have been divided into smaller farms, and the profits from the various pursuits are probably doubled since 1870.

PARISH OF SAINT MARY'S.

The parish of Saint Mary's has a front on four great bays, connected with the Gulf of Mexico, 40 miles in extent. It has an average width of a little more than 12 miles. It is about 50 miles by the main road through the parish from its western line, near Jeannerette, to its eastern line, at the Bœuf crossing of the Morgan Railroad. Before the year 1868, the western line of Saint Mary's extended to a point only 1 mile east of New Iberia, and Petite Anse Island was included in the limits of the parish. Its largest crops then were 50,000 hogsheads of sugar and 70,000 barrels of molasses. Saint Mary's then contained 170 sugar plantations, lining the Teche on both sides, Bayou Cypremort, Bayou Salé, Atchafalaya, Berwick's Bay, the Bœuf, Bayou Shaffer, spread out on the Au Large prairie west and the Cypremort prairie south of Jeannerette, and on the three beautiful islands, Petite Anse, Grand Cote, and Cote Blanche. Belle Isle in former days was cultivated as a sugar plantation by its proprietor, Dr. Walter Brashear. Saint Mary's appears to splendid advantage from the pilot-house of a steamboat as she plows through these navigable bayous, lakes, and bay, and to poor advantage on the best map that can be drawn.

GENERAL ELEVATION.

The highest land in Saint Mary's, excepting the islands Cote Blanche and Belle Isle, is not over 15 feet above the level of the Gulf of Mexico. There is a daily tide of from 1 to 2 feet in all of her bayous and lakes. The highest land around Berwick's Bay has an elevation of about 10 feet, and from the bay to Pattersonville, and three or four miles up the mouth of the Teche the elevation is but little above that around the bay and on the Bœuf. At Franklin, the west bank of the Bayou Teche is about 13 feet above tide-water, and the east bank is a little lower. Below Jeannerette, the elevation is 15 feet. The two islands, Belle Isle and Cote Blanche, at their highest points rise more than 160 feet above the level of the Gulf. The sea marsh is most of it under water during storms from the Gulf, sweeping toward the land at this point.

SOIL.

There is not an acre of poor land in the parish. Fields that have been cultivated in corn and sugar-cane for nearly a century without manure still produce good crops. The lands are easily and cheaply restored after long continued and severe cropping. The parish has land restoratives within its limits better than Peruvian guano, as we will show in an article under its proper heading.

AGRICULTURAL PRODUCTS.

Cotton is cultivated in Saint Mary's, but it is not considered a profitable crop. Sugar-cane is the true crop of the parish. Much of the land is adapted to rice. The sea marsh, by local levees and draining-machines, make rich rice lands. The soil consists principally of a vegetable deposit of great depth. Swamp-lands or any of the reclaimable wet lands are fine for rice; corn, sweet and Irish potatoes, pumpkins, peas, beans, indigo, ramie, arrowroot, ginger, castor-oil bean, tobacco, hay, cabbage, and turnips do well in this climate, though a part of this list has only been cultivated to a limited extent. Sea-island cotton does well on the island along the coast.

GARDENS.

Garden vegetables grow in this parish the year round. Nearly all kinds of vegetables grow the same here as in the North and West. The winter gardens contain onions, mustard, eschalots, leeks, garlic, beets, cabbage, carrots, turnips, cress, roquette, lettuce, radish, cauliflower, celery, &c. Good gardens have an abundance of vegetables, fresh the year round. White head cabbage and fine rutabaga and red-top turnips may be taken fresh from the garden in January and February, and also in the summer and fall.

CROPS, TRADE, ETC.

Thirteen thousand slaves were formerly owned in this parish, valued at about $6,000,000. Before the war, about 15 steamers were engaged on these bayous, lakes, and bays in the busy season of the year, and as many as 125 vessels have cleared at the port of Franklin for northern and southern ports, freighted with molasses, sugar, and live-oak, in one season. The yield per acre in an ordinary season is a hogshead of sugar and 50 or 60 gallons of molasses. In a good crop year double that amount is secured. The sugar crop is cultivated nearly the same as corn.

In boiling the crops it usually takes about 3 solid cords of wood to the hogshead. The crop is laid by before July, and sugar-making commences the latter part of October or early in November.

RICE CROP.

A Louisiana rice planter gave the following statement: Rice lands well cultivated, not flooded, produce 6 barrels, of 250 pounds each to the acre, or 15,000 pounds. Flooded lands produce 10 barrels. The flooded rice weighs more heavily than rice not flooded. One hand, with proper implements and teams, can make 10 acres of unflooded rice, and more if flooded. In less than four months from the time the ground is plowed to receive the seed, the rice crop may be harvested. Rice is cleaned at the rice mills, at a cent a pound. There are twelve or fifteen mills now in operation in the State, and they all do a good business. Most of them are situated in the parish of Plaquemines.

ORANGE CROPS.

The yield of oranges per acre is enormous. It is impossible to make any estimate that is reliable, as we have not the acres or yield of any one orchard, but below New Orleans single orchards sometimes yield from $10,000 to $30,000 yearly, at a dollar a hundred, the price they often command, being considered the finest flavored oranges in the world. The largest orchards produce over 3,000,000 of oranges yearly. Some trees commence bearing when they are five or six years old, and earlier bearing can be produced by grafting and budding. A full-grown, healthy orange tree, fifteen or twenty years old, in a good season will produce 5,000 oranges. It takes from 300 to 400 oranges to fill a barrel, equal to three bushels, so the largest orange trees produce from 40 to 50 bushels of fruit in a favorable season. Oranges usually sell on the tree at $10 a thousand.

TOBACCO.

The profits of tobacco culture in this country are satisfactory, but it takes too much skill and care to make and save a good article. Sugar

and rice are less troublesome and more profitable. Perique tobacco is generally produced in Saint James Parish, but it may be made in Saint Mary's. It is the best smoking-tobacco in the world. Perique snuff is not excelled by any other.

FRUITS.

Fruits of various kinds ripen in Saint Mary's from April to November.

The mespilus, or Japan plum tree, a beautiful evergreen as large as the orange, blossoms in the fall. The fruits grow during the winter and ripen in March, except when the winters are uncommonly cold; then the fruit falls. The fruit is yellow, pear-like, and very good.

Dewberries, large and abundant, grow wild all over the parish; they ripen in April. Blackberries are abundant: they ripen in May. Mulberries ripen in May. Strawberries are prolific when properly cultivated, and continue in bearing six or eight weeks: they ripen in April and May.

Eight or ten kinds of plums ripen in June and July. Eight or ten kinds of figs ripen in July and August. Peaches ripen in August.

Apples ripen in July, August, and September. The muscadine grape, or black scuppernong, grows wild on the banks of all our bayous and in the forests; it ripens in August. The white scuppernong grape thrives finely, especially on the islands of the coast.

Pears of superior quality grow on the banks of the Teche and thrive well. They ripen in August.

Olives do well in this parish, but no attention has been given to their cultivation. They would do well on Belle Isle, Cote Blanche, and the other islands.

Almonds do well in Saint Mary's; they ripen in the fall. Pecans ripen in September.

Oranges ripen in October, and frequently hang on the trees till December, improving in sweetness all the while. This is the queen of fruit trees. Its robes of deep green in mid-winter are beautiful, and its myriads of beautiful white fragrant flowers in early spring are only eclipsed by its golden fruit in autumn. Oranges are so plentiful in the lower part of the parish, that they are frequently given away by the barrel and seldom sell for more than a dollar a hundred. They are much finer than Cuba oranges.

Bananas, lemons, limes, and shaddocks ripen in October. They are more delicate than the orange tree, and seldom do well without a little extra protection, except in favorable locations in the lower part of the parish.

Pineapples may be raised in the parish with slight protection. Doubtless other tropical fruits will be introduced into this country, and be ranked in time with the staple fruits of this parish.

Apples, currents, damsons, gooseberries, English cherries, and perhaps a few other northern fruits, do not thrive well in this climate. It will be understood that we do not state that all the fruits in our list are

found in abundance in Sant Mary's. We merely wish to state that experience has proved they may be produced in abundance, excepting apples and a few other fruits, if the people will cultivate them.

Oranges, plums, and figs are the only cultivated fruits that are abundant, and they require little care or culture. This portion of Louisiana is better adapted to fruit culture than any other portion of the United States. The fruit here is less troubled by worms, bugs, insects, and diseases than any Northern State. Fruit culture in Saint Mary's is yet in its infancy. When as much attention and skill are bestowed upon fruits as there has been brought to bear upon the same business in the Middle States and New England, our parish will be a paradise.

SWAMPS AND TIMBER.

In the rear of nearly all the plantations in the parish there are cypress swamps, containing a heavy growth of trees for building and fencing purposes, for making sugar hogsheads and molasses barrels, and all other purposes for which cypress lumber may be used.

CLIMATE.

This parish is favored with a comfortable climate. Strangers from mountainous and hilly regions cannot understand how this can be, but we will submit a few facts on the subject. This parish borders on the Gulf coast; we have healthful and cooling sea-breezes during the summer and fall. Persons sleeping in rooms that are well ventilated never complain of hot or uncomfortable nights, even in July and August. In traveling on steamers on these waters in July and August by night, seated in front, the air is sometimes too cool to be comfortable. In the summer of 1867, when the thermometer in New York and Philadelphia was up to 103° in the shade, in Franklin it did not go above 92°. The large surface of water, lake, bay, and bayous around and within Saint Mary's tempers the summer heat and winter cold. The bland south breezes from the Gulf bring comfort, health, and healing on their wings.

The first and lightest frosts seldom appear till November. We have not the statistics of the weather in this locality, but those of a parish a little farther south than this show that in the last seventeen years the first frosts appeared three years in the latter part of October, eleven years in November, three years in December. The winters are merely the climate of Northern autumns.

HEALTH.

This climate is decidedly healthful. Chills and fevers and diarrhea are the principal diseases, and these are generally brought on by imprudence or carelessness. They usually yield readily to remedies if applied promptly. Most all the disorders of higher climates are rare in Saint Mary's. The yellow fever has never been an epidemic in Franklin, Centreville, or any village above Franklin but twice since the country was settled.

POPULATION.

Before the war the white population of the parish numbered about 4,000. The people have always been noted for their hospitality and for their love for law and order. The majority of them were decidedly opposed to secession, and were in favor of Bell or Douglas. For this reason they were not included in the original emancipation proclamation of President Lincoln. But during the war nearly all the citizens of the parish sided strongly with the South, and as soon as the war was over they ardently desired peace, and intended to act in good faith toward the old Government and flag. Northern gentlemen and families who have settled among them since the war will testify that they have been treated kindly, and that they can live as securely here as anywhere in the North or West. The stranger and the freedman will be as fairly dealt with by a Saint Mary's jury as the original citizens of the parish.

PLANTATIONS AND FARMS.

There are about 150 farms in Saint Mary's, within its new limits, its western line extending from the upper line of the Grevemberg plantation, near Jeannerette, striking between Cypremort and Grand Cote Week's Island.

There are 20 plantations on Bayou Salle, nearly all of them in cultivation. Twenty-five years ago there were 25 sugar-mills on that bayou, all run by horse-power. Bayou Salle is about 20 miles in length. The tillable land on it is a mile wide; plenty of cypress in the rear of most of the plantations. These are the best sugar lands in the parish. Bayou Cypremort has 15 plantations; the tillable land is wider than that of Bayou Salle. It has an abundance of timber, ash, gum, magnolia, oak, and a considerable amount of cypress. From Franklin to the mouth of the Teche the distance is 15 miles. On this part of the bayou there are 36 plantations. The width of the tillable land on both sides of the bayou, on which these plantations front, is over 2 miles, in some places 3. The distance on the Atchafalaya from the mouth of the Teche to Berwick's Bay is about 12 miles, and on this part of the Atchafalaya, there are about 24 plantations, some of them small. The tillable land is about the same width as that of the Teche. On Berwick's Bay and the Bœuf there are not half a dozen plantations in running order. There are 23 plantations and small farms on the bay and bayous and lakes near it. From Franklin to the upper line of the parish of Saint Mary's there are, on the Bayou Teche, 40 plantations and farms. The width of the land above Franklin, on the Teche, is greater than that below, and the land is higher. In places on each side of the bayou the tillable land is more than 2 miles wide. South of Jeannerette, on the head of Bayou Cypremort, the land is from 4 to 5 miles in width. There are more small farms in this parish than formerly. Nearly all the plantations of the parish are now under cultivation.

PROFITS OF SMALL SUGAR FARMS.

M. E. Meynard, a native of Louisiana, and raised in Saint Mary's, in 1868 rented a small farm at Charenton, 9 miles from this place, planted and cultivated 40 arpents of land (about 37½ acres). He planted in cane 22 arpents; corn, 15 arpents; rice, Irish and sweet potatoes, &c., 8 arpents. He hired a white man to assist him in his crop six months and paid him $90. He hired negroes occasionally for a few days. This cost him in all $55. His whole labor account for the season was but $145.

HIS CROP.

He made sugar cane enough to yield 45 hogshead of sugar and 60 barrels of molasses. He made rice enough to last his family two years. He made Irish potatoes enough for his own use and sold the surplus for $135. He raised sufficient corn and fodder to supply his place for one year. Not having a sugar-mill of his own, he contracted to have his cane hauled and worked up 4 miles distant, and gave a third of the crop as toll.

Gross cash proceeds for Mr. Meynard.

30 hogsheads of sugar, at $120 per hogshead	$3,000 00
40 barrels of molasses, at $20 per barrel	800 00
Irish potatoes sold for $135	135 00
Rice, sweet-potatoes, and other products	50 00
	3,985 00
Whole cost of labor	145 00
Proceeds of Mr. Meynard's labor	3,840 00

Mr. Brownson, who made up Mr. Meynard's crop, sold his toll—15 hogsheads of sugar, 20 barrels of molasses—for over $2,500. Gross sale of sugar, molasses, rice, and potatoes from the entire crop, $7,085.

The above results are as true as they are extraordinary. The seed cane was good, the season good, and the industry and management could not be excelled by any one. Mr. Meynard, at the close of the war, came home from the Confederate army without a dollar. He now owns the place on which he made the above crop.

HEDGES.

The pyracanth makes the best hedge in this country. It is propagated from cuttings, is an evergreen, beautiful, compact, full of short thorns, grows thick and close to the ground, can be trained to any desired shape, and makes a good hedge in a few years. The cherokee rose is useless. The chickasaw rose makes a good hedge, but it makes a mountain of vines and foliage. The bois d'arc makes a good hedge, but it requires too much labor and is too much inclined to grow tall and form trees.

THE CHINA, CATALPA, AND BLACK LOCUST.

The china is a fine shade tree; bugs and worms will not live on or around it. It is propagated readily from seeds, makes good firewood even when green, makes good cabinet wood, grows rapidly, not easy to decay, and makes good fence-posts. The limbs cut from trees planted near houses in the prairies supply many families with wood. Its growth is rapid and it bears close trimming. Nearly the same facts hold good in regard to the catalpa and the black locust.

FERTILIZERS.

The deposits in the bottom of the bayous of the Saint Mary's are rich beds of muck, into which a pole may be run to the depth of 10 feet or more. This is an excellent manure for gardens. The supply is inexhaustible. The sea-marsh deposit is a fine fertilizer, but the cheapest and best of all is the cow-pea. All sugar planters will agree to this fact. Planted among the corn and the vines plowed in, the land becomes productive at once. So the planter may get a full crop of corn, and enrich his land with a crop of cow-pea vines the same year at a trifling cost per acre.

OVERFLOWS.

The west bank of the Teche, from a point 5 or 6 miles below Centreville to its source in Saint Landry, has not been overflowed since the memory of man, and it has no levees to protect it. This bank protects Bayou Salle, Cypremort, and all of the country west of this bayou. The lands in the lower part of the parish and on the east side of the Teche here overflowed in 1778, 1828, and 1867. When Grand Levee on the Mississippi stands firm, no part of Saint Mary's can suffer from overflow.

GENERAL ITEMS.

The fishes of the waters in and around Saint Mary's are redfish, black drum, trout, sheephead, flounder, mullet, croaker, cat, buffalo, perch, soft-shell turtle, gar, and choupique.

White men stand field labor in Saint Mary's as well as colored men, and have less sickness and mortality. Milch cows, when perfectly attended to, do well in this parish. No richer milk or finer butter is produced anywhere than that formerly produced on Bayou Teche. Hogs, chickens, and all kinds of poultry do well in this parish, excepting turkeys, which, from some unknown cause, do not thrive well.

Steamers may land at nearly all of the plantations in this parish. The parish is situated on the tide-water, and never suffers by freshets from heavy or long-continued rains.

The crops of Saint Mary's are laid by and field work stops, or may stop, by the 1st of July.

The Teche is considered the most beautiful bayou in the State.

BAYOU CYPREMORT.

We can give no adequate idea of the beauty of the forests of this bayou. Both banks are lined with tall, majestic magnolias, many of them 50 and 60 feet high and clothed with a foliage which, in beauty of hues and gracefulness of their garments, beggars description. Its millions of dark-green leaves, the upper surface polished and glistening in the sun, the underside a beautiful brown color, the graceful form and noble bearing of the tree, and in its season myriads of large, white fragrant flowers ornamenting all parts of its rich foliage from summit to base, secure to it rightfully the title of queen of the forest. Mingled with the magnolia on the bayou, we everywhere find the elm, sweet gum, ash, oak, black walnut, pecan, hickory, and a rank growth of grapevines clinging to the tall trees and burying saplings and the small undergrowth beneath them, forming vegetable mounds as large as a dwelling-house of medium size. The road leading through these enchanted forests along the banks of the bayous is firm, smooth, and sandy. The bayou itself is by no means beautiful, since it is usually filled with rank weeds, rushes, willows, and numerous other trees and bushes peculiar to the shallow and narrow bayous. It can in no place be navigated with a skiff.

COTE BLANCHE.

This island is 10 miles from Franklin by water and 20 by buggy-road, via. Cypremort and across the marsh. Cote Blanche rises up an island mountain out of the marsh by the Gulf of Mexico. Its highest elevation is 180 feet above the level of the Gulf. It has hills and dales, valleys and plains, lakes and springs, a rich soil, and a climate in which it is hard to get sick or die. The pure sea breezes from the gulf fan and cool its surface during the summer and autumn months and temper the winds of winter. On the south side, next to the Gulf, is a bold precipice a hundred feet high, whose base is washed by the salt waves. Here is fine bathing when the tide flows in; the beach is fine and smooth, and the bottom gradually deepens so that bathers may wade out a hundred yards. On the bluff behind the precipice, overlooking the Gulf, the surface is rolling. A fine site for a village of pleasure-seekers, and such sleeping and bathing as may here go almost hand in hand, few have ever enjoyed.

This island, at some future day, may be made one of the most beautiful spots on the face of the earth. Here sugar cane, sea island cotton, tobacco, rice, corn, sweet and Irish potatoes grow in the greatest luxuriance, and grass abounds where the plow or shade trees do not oppose it; and when we come to the fruits, what may we not say of it? This island of 2,000 acres may one day become almost an unbroken vineyard, and the best wines and brandies, in large quantities, may be exported from it. Here olives, oranges, lemons, bananas, citrons, limes,

and many other tropical fruits may be made to bring large revenues to the island. The mespilus, peaches, figs, plums, dewberries, blackberries, strawberries, all do well in this favorite spot, and here melons and garden vegetables grow and thrive as they seldom thrive elsewhere. In addition to all its other merits, it affords the finest pasture for cattle and horses, a fine range for hogs and domestic fowls. In the waters in front and the bayous around the island the supply of fine fish is inexhaustible, and oyster reefs in abundance; deer, geese, duck, and brent are at the service of epicures and hunters. The broad sheet of marsh around this island furnishes the best winter range for cattle. Thousands could find ample support, as they do in the marsh in other portions of the Gulf coast. After the first frosts of winter appear, the immense sheet of stubble is burned off and an abundant growth of young grass continues to spring up during the winter and spring. The most of the surface of this marsh is firm enough to bear up horned cattle as they rove over it for food when the grass on the prairie is dead.

So much for Cote Blanche Island, now the property of William Fellowes, esq., of New York.

Sugar crop of Saint Mary's, 1859.

	Hogsheads.
Bayou Teche, New Iberia to Franklin	14,155
Franklin to mouth of Teche	9,461
New Iberia to mouth of Teche, 60 miles	23,616
Atchafalaya, mouth of Teche, to Berwick's Bay, 12 miles	5,394
Berwick's Bay	1,818
Bayou Boeuf	3,317
Bayou Salle, 20 miles	3,957
Bayou Cypremort, 20 miles	2,443
Weeks's or Cote Blanche Island	711
Petite Anse, or Salt Island	662
Cypremort, Au Large, and Petite Anse prairies, Grand Lake, &c	2,716
Sugar crop of Saint Mary's, 1859	44,634

Molasses, same year, about 70,000 barrels of forty gallons each, 2,800,000 gallons.

PARISH OF SAINT LANDRY.

AREA AND PHYSICAL CHARACTER.

The parish of Saint Landry contains about 1,350,000 acres, nearly equally divided between woodland and prairie. About three-quarters of the land is suitable for planting and grazing purposes. It is well watered by numerous bayous, running streams, and branches, nearly all clothed with a generous growth of timber, in many places a mile wide. Between the timbered streams fine natural meadows spread out, clothed over nine months of the year with grass that contains large herds of cattle and horses.

THE SOIL AND FACE OF THE COUNTRY.

In the upper part of the parish nearly all the streams fed by springs take their rise. Here the country is somewhat hilly and is covered by a dense forest of pine, oak, ash, walnut, hickory, and other valuable forest trees. Here also are found valuable mineral springs, which are much resorted to by invalids and which possess great curative properties. Considerable deposits of limestone are here found, from which, for home consumption, is made a very excellent lime, and a very fine quarry of marble, which is susceptible of a beautiful polish and is valuable for being made into mantel-pieces, monuments, &c. The soil in the middle and lower portion is excellent, resting on a subsoil of a fine brown or grayish clay, which, when plowed up, exposed to the weather, and mixed with surface soil, is as rich as the upper stratum. That subject to overflow, being rich alluvial, is inexhaustible and adapted to all the products of this latitude. The soil of the prairie is generally mellow and easy of cultivation. Grass covers all portions of the parish except the cultivated fields or surface covered by forests or water. More than half a million acres of grass in Saint Landry is not under fence. The greater portion of the wealth of Saint Landry has been obtained from horses and cattle on the prairies, raised without hay or shelter. On these prairies a hundred thousand tons of hay might be made yearly for the New Orleans and other markets.

The following geographical description is found in a report made by Darbey in 1817, when the Sabine was the western boundary of the parish of Saint Landry, including a description of the Opelousas prairie:

PRAIRIES AND HERDS.

This vast expanse of natural meadow extends 75 miles southwest and northeast and is 25 miles wide, containing more than 1,200,000 acres, inclusive of the numerous points of woods that form its margin on all sides. This prairie begins 13 miles northwest of Opelousas and, gradually opening to the southward, sends out various branches between the bayous.

Of the herds as there seen on the prairie the same author remarks: "Here you behold those vast herds of cattle which afford subsistence to the natives and the inhabitants of New Orleans. It is certainly one of the most agreeable views in nature to behold from a point of elevation thousands of cattle and horses of all sizes scattered over the intermediate mead in wild confusion. The mind feels a glow of corresponding innocent enjoyment with those useful and inoffensive animals grazing in a sea of plenty. If the active horsemen that guard us would keep their distance, fancy would transport them backward into the pastoral ages. Allowing an animal to be produced for every five acres more than two hundred and twenty thousand can be yearly reared and transported from this prairie alone, which, at an average of ten

dollars a head, would amount to $2,200,000." At the time the above article was written, the year 1817, Mr. Darbey estimated the herds of the three greatest stock owners of the country, Mr. Wikoff, Mr. Fontenot, Mr. Andrus, at 20,000 head.

OVERFLOWS.

Portions of Saint Landry on the Atchafalaya and some of the bayous are subject to overflow when Grand Levee gives way, but most of the lands have never been under water since the parish has been inhabited by white men, and never can be; and even the overflowed lands may be converted into rice plantations to some extent, or reclaimed when the levees of the Mississippi and Atchafalaya are made secure. Most of the lands subject to the overflow are the richest in the world and contain a heavy growth of cypress.

CROPS, FRUITS, AND GARDENS.

The crops, fruits, and gardens of Saint Landry and of the other five parishes described in this circular, excepting cotton and oats, are less troubled by insects and vermin and less liable to disease than they are in higher latitudes in other parts of the United States. The surface cultivated in Saint Landry yearly amounts to about 100,000 acres. Abut one-third of this is planted in cotton. Not a tenth part of the tillable land is under cultivation. With a working population like that of the Western States, and the same kind of cultivation, that parish might send to market yearly 100,000 bales of cotton, 50,000 hogsheads of sugar, 75,000 barrels of molasses, and rice, tobacco, broom corn, basket willow, beeves, hay, horses, milch cows, sheep, hogs, hides, poultry, eggs, rosin, turpentine, and other valuable products to the amount of from $10,000,000 to $15,000,000. Such varied and valuable resources in a climate so salubrious can hardly be found anywhere else on the face of the earth.

TIMBERED BOTTOMS.

The timbered bottoms are rich and are excellent for sugar, rice, cotton, corn, sweet and Irish potatoes, peas, tobacco, melons, pumpkins, hay, garden fruits, &c. No richer land can be found anywhere. They are heavily timbered with the best of sugar wood, and the swamps contain an inexhaustible supply of the best of timber for building purposes and for hogsheads and barrels for the sugar planters.

BAYOUS, RIVERS AND STREAMS.

The Atchafalaya on the east connects this parish by steamboat navigation with New Orleans.

The Bayou Courtableau, formed by the junction of the Crocodile and the Bœuf, affords good navigation to Washington the entire year, with

slight and occasional interruption during the summer. The route is down the Courtableau to the Atchafalaya, thence up the latter to the Mississippi River, and thence to the city of New Orleans. The Bayou Bœuf is the channel of transportation for the planters by means of barges to Washington, and the Crocodile affords means of transportation to the lumbermen. The Plaquemine Brulée, the Mallet, the Cane, and the Nez Pique are fine streams, but not navigable. The Mermentau, formed by the Nez Pique and Plaquemine Brulée, is a fine, navigable stream. Vessels ascend it some 70 miles for lumber, which is taken to Texas, Havana, and the Mexican ports. Upon these streams are found large bodies of timber, suitable for all the purposes of building and fencing, and they afford an unfailing supply of water for stock. The parish has 230 miles of navigable water.

THE SUGAR CROPS.

Small crops of sugar cane on small farms are well adapted to white labor. The cane may be planted in the fall, winter, or spring, and laid before the 1st of July, and no labor is then needed in the crop till the 1st of November, when the ripe cane is ready for the mill. Sugar cane is not subject to disease, and the ravages of bugs and insects like most other crops. Small sugar farms, where from 20 to 100 hogsheads of sugar are made by white labor, are very profitable. They are a complete success.

PROFITS OF SUGAR CANE AND COTTON CULTURE IN SAINT LANDRY.

The following is the most accurate statement in reference to costs and profits that I could procure:

Messrs. LEWIS and MULLET:

GENTLEMEN: I employed the past year twenty-two hands, to wit: Fifteen men, two boys, and five women. Had in cane 90 acres, in corn 170, and in cotton 100 acres, besides several acres in potatoes and garden.

RESULT OF THE YEAR'S WORK.

Ground 50 acres of cane in 18 days, making 108 hogsheads of 1,250 pounds each, which sold at 10 cents	$13,000
I made 200 barrels of molasses, equal to 8,000 gallons, at 70 cents	5,600
Also 7,700 barrels of corn	2,100
Also 86 bales of cotton, equal to 38,000 pounds, at 22 cents	8,514
Gross receipts	29,214

EXPENSES.

My total expense for provisions, repairs, hire of labor, sugar-maker, hogsheads, and barrels were $10,000, which, deducted from the gross income, leaves $19,214 as my year's income.

Yours,

ALBERT GANTT.

H. M. Payne reports as follows:

On the Borbreck and Saint Peter's plantation sugar produced 460 hogsheads of 1,250 pounds each, which, at $100 per hogshead, yielded	$46,000
27,600 gallons of molasses, at 50 cents per gallon	13,800
Gross profits	59,800
Expenses	19,000
	40,800

Besides the above, we produced 15,000 bushels of corn, which is at least 3,000 or 4,000 bushels more than we require for the use of the plantation.

YIELD OF COTTON, SUGAR, AND OTHER CROPS.

In Saint Landry 13,000 pounds of seed cotton to the acre, or about 400 pounds of lint, is a fair yield. In the true cotton zone, which is above the latitude of this parish, about 32° north, 8,000 pounds of seed cotton may be produced, or 600 pounds of lint. Whilst it is admitted that the cotton plant is liable to injury from insects, still, in the main, as many full crops are made as any other product of the soil, and the chances of success are by many thought to be as favorable in this branch of industry as in any which engages the farmer. One hogshead of sugar and 60 gallons of molasses may be considered an ordinary yield per acre in this parish, but I was assured by a gentlemen that 25 hogsheads of sugar have been produced from 6 acres in Saint Landry. That is the best yield that has ever been known in a sugar parish in the State. Sixty gallons of molasses usually drain from a hogshead of sugar. Commercial manures will doubtless largely increase the average yield of sugar in all these parishes, and the same facts hold good in regard to cotton and other crops. The yield of corn in Saint Landry is about 35 bushels to the acre; potatoes, sweet and Irish, well cultivated, from 250 to 300 bushels to the acre. Pumpkins, peas, beans, pindars, broom corn, &c., give heavy returns.

MASTS AND HOGS.

Saint Landry abounds in oak forests and masts of various kinds. The hog-range is excellent, and while clover grows luxuriantly, equal to the native grasses, in no other portion of the United States are hogs more healthy or profitable than in Saint Landry.

OAK BARK AND TANNERS.

A country abounding as this does in oak bark, sumac, and hides, and where tan-pits may be kept open during the entire winter, offers great inducements to tanners.

FEEDING STOCK.

Stock raisers feed from the 15th of January to the 15th of March. In mild winters very little food is necessary. Wild stock are never fed on hay and have no shelter. They yield 25 per cent. income on the investment. Gentle stock may be made to yield over 40 per cent.

WELLS.

More wells, as a general thing, are found in Saint Landry than in the other parish. Good water is found at about 25 feet. Owing to the scarcity of stone, and it being more convenient to use wood, they are curbed with cypress.

CROPS ADAPTED TO SAINT LANDRY.

Cotton, corn, sugar cane, broom corn, ramie, flax, hemp, sweet and Irish potatoes, cow peas, indigo, rye, sorghum, pindars, cotton oil, beans, oats, barley, pumpkins, cabbage, turnips, and garden vegetables of all kinds.

FRUITS.

Peaches, apples, pears, plums, figs, grapes, quince, blackberries, dewberries, strawberries, May apples, persimmons, May haw, and papaws. Oranges may be cultivated successfully in the southern part of the parish. But little attention is paid to fruit culture.

PARISH OF IBERIA.

GENERAL DESCRIPTION.

Iberia parish extends from Belle River, east of Grand Lake, to a line running from the west end of Lake Peigneur to the mouth of Petite Anse Bayou. It is bounded on the north by Saint Martin's and on the south by Saint Mary's; east by Assumption, and west by Vermilion and La Fayette. Its length is about 45 miles. Its widest part is about 20 miles. Much of the eastern portion is water and cypress swamp. The tillable land along the west side of the Morgan Railroad and the Teche from the parish line below Jeannerette to New Iberia, called the Au Large prairie, has a width of about 6 miles, and it is a little wider above, between the railroad and Lake Peigneur; the land from the line where the railroad enters the parish below Jeannerette to the line where it leaves it, west of Lake Tasse, is about 20 miles in extent. All the land is tillable between Lake Peigneur and Lake Tasse and in the great bend of the Teche northeast of New Iberia. There is a sheet of tillable and fine grazing land south of Lake Peigneur. The Teche is lined with plantations nearly the entire distance from the entrance into the parish of Iberia, east of Lake Tasse, to the line where it leaves the parish, below Jeannerette.

The portion of the parish that borders on Grand Lake is a dense cypress swamp, and bordering on this swamp there is a growth of gum, ash, oak, and other timber. The tillable land opposite and above Jeannerette is 2 or 3 miles in width. Around the great bend of the bayou above, called Fausse Pointe, the tillable land has a much greater width.

The lands in all parts of this parish are rich. On the west side of the bayou there is a scarcity of wood-land, and on the east side is an abundance of cypress and wood for sugar-making.

THE TECHE AND ITS SCENERY.

From the point where the Teche enters the parish of Iberia, about 5 miles below Saint Martinville, by the windings of the bayou, to New Iberia, the distance is about 25 miles. This portion of the bayou is extremely beautiful. Its banks are generally 18 feet above tide-water, and they descend gently to the edge of the water at an angle of less than 30 degrees. The bayou around this bend in the low-water season is 90 feet wide, and has a depth on its most shallow bars of 3½ feet. Forest trees and water willows line both banks most of the distance, the branches in many places hanging over the water and brushing both wheel-houses of steamers as they pass up and down between New Iberia and Saint Martinville. The houses of the planters are generally situated near the edge of the bayou. Most of the houses are plain, but comfortable, and the proprietors are quite independent. There are many live-oaks, pecans, and other noble forest trees growing on both banks of the bayou, that add greatly to the beauty of the section of the parish. Below New Iberia the Teche is broader and deeper than above. The plantations are larger, the houses and improvements finer, and there are fewer trees growing on its banks. Here we find palatial residences, grand sugar-houses with chimneys towering skyward, plantation villages called the "quarters," orange groves, groves of the mespilus, flower-gardens and beautiful shrubbery, floating bridges, and the general paraphernalia of wealth and lordly possessions.

THE AU LARGE PRAIRIE.

This is a stretch of land south and west of New Iberia, and a more beautiful prairie country is seldom or never seen, and is cultivated principally in sugar.

AROUND NEW IBERIA.

The more we circulate over this country, of which New Iberia is the trading center, the more we are impressed with its beauty and its value for farming purposes. It is a lovely and wonderful country. Its bayous, lakes, prairies, and wood-lands are all beautiful. The sea breezes roll over it and give health and long life to its inhabitants. Its climate is a medium between the tropical and the north temperate, combining most of the advantages of both, and the evils of neither. Steamers from New Orleans and vessels from the ocean penetrate its very center, and the cars of the Southern Pacific Railroad, connecting New Orleans and the Pacific coast, pass through it daily.

ORANGE ISLAND.

Orange Island, now the property of the great artist, Mr. Joseph Jefferson, was formerly called Miller's Island. It bounds Lake Peigneur on the south and lies in a curve of the lake, which has the shape of a new moon. The highest point of the island is 75 feet above the level of the lake and 84 feet above the level of the Gulf of Mexico. It has hills, valleys, level and inclined planes, and from its bluff banks in places the branches of trees hang out over the waters of the lake.

Orange Island is in a line with Petite Anse, Grand Cote, and Cote Blanche Islands. Each is separated from the neighboring island by a distance of nearly 6 miles.

Orange Island rises above the level of the surrounding prairie and the lake, as the other islands rise above and overlook the surrounding sea marsh. But a short distance off flows the Petite Anse Bayou, draining the neighboring country, and emptying into the Gulf, 10 miles below the island. The constant sea breeze renders the spot healthy and pleasant as a residence. There is on this island what is claimed, and I have no right to doubt, the oldest orange grove in this country. Many of those trees are very large, some of them a foot in diameter. Mr. Jefferson now has eight orange groves, and raises an immense crop of oranges every year. There are over one thousand young and bearing pecan trees. Also cherry, fig, peach, quince, mespilus, mandarins, lemons, and blue plums. The finest magnolias and live-oaks in the world grow on this island. The magnolia grows to an enormous size. Mr. Jefferson has erected a palatial mansion on the elevation overlooking the lake, which, with its surroundings, makes it one of the most beautiful houses in the United States. Passing from his residence to his boat-house on the lake, you go through an avenue of stately live-oaks, a magnolia and orange grove. Seen from the summit of the bluff the lake spreads out almost beneath the feet of the observer, while the gleam of its silvery surface closes the vista of the principal avenues leading from the house. Mr. Jefferson has 9,000 acres; the soil is very rich, and most of it easy of cultivation, producing in one instance four hogsheads of sugar per acre. He now uses the entire property for cattle-grazing, and has probably 5,000 head. He has a number of fine blooded horses and a good collection of registered cattle. He is very favorably impressed with the Holsteins; has watched some for five years to note the effects of the climate, and is very well pleased, and will go more extensively into the breed hereafter.

CROOK'S HISTORY AND DESCRIPTION OF SALT ISLAND.

Until recently, Louisiana, or at least the southwestern portion, was supposed to be of alluvial origin, a river delta, in fact, without any mineral resources whatever, and the discovery some years since of a remarkably fine and rich bed or deposit of rock salt was a genuine sur-

prise, followed a year or two later by the equally unexpected discovery of an extensive bed of almost pure sulphur.

An attempt was made to reach and work this sulphur deposit, but as it failed at the time and is for the present abandoned, our attention will be given to the deposit of rock salt, which is now being worked by a mining company of New York capitalists.

The locality of the mine is Petite Anse Island, one of a series of islands (so called) or small hills in Southwestern Louisiana, five in number, and 6 miles apart, running in a direction nearly northwest to southeast, and in so direct a line that a ruler laid on the map will cut the centers of all of them. Beginning at the west, they are named Jefferson's, Petite Anse, Grand Coteau, Cote Blanche, and Belle Isle; no minerals have been found on any of them except Petite Anse. Although called islands, the only one really entitled to the name is Belle Isle; all the others being merely hills rising out of the sea marsh that skirts the southern portion of Louisiana. Petite Anse is in extent about 2,500 acres; the soil is quite sandy but fertile, and the highest point is 180 feet above tidewater.

The discovery of the mine or salt proper was made in the early part of the late civil war, and was brought about by the strictness of the Federal blockade and consequent stoppage of the supply of salt from abroad. At least as early as the beginning of this century salt springs or licks were known to exist on the island, and during the war of 1812 parties utilized the water of these springs in the manufacture of salt for local consumption. The return of peace brought salt into the country again, and as the rudely improvised plant of the Louisiana manufacturers could not compete with the better furnished mines, the work was abandoned, and soon became little more than a tradition. The late war again deprived this portion of the country of salt, and, driven by necessity, the old wells were hunted up and cleared out, and the manufacture of salt from the brine was again resumed with such appliances as could be found on the sugar plantations. The demand soon became too great for the supply furnished by the wells, and in cleaning one of them out and deepening it for the purpose of getting a better supply, the unexpected discovery was made of rock salt only 16 feet below the surface.

EXTENT OF THE DEPOSIT.

Immediate examination was made and the fact was soon established that the rock salt was found in considerable quantity. A report was at once made to the Confederate Government at Richmond and a more extended survey was had under their auspices, resulting in their taking charge of and working it for some time. After the close of the war a more thorough survey was made, with a view to the development of the mine and placing it correctly before investors. This survey showed that the deposit underlies about 150 acres of surface area, and that wher-

ever struck it was identical in quality and structure. The depth of the deposit is unknown, but is believed to be considerable, as the workings show the stratification to be nearly perpendicular, which would indicate an upheaval, and that the present width of the mass was its original depth. The floor of the present workings is 140 feet from the surface, the shaft penetrating 25 feet of surface soil and 115 feet of salt, of which 50 feet is left for roof and 65 feet excavated. As this level will yield, exclusive, &c., 15,000,000 tons of salt, it will be seen that there was no need of any deeper exploration, and, as there is a possibility of striking water at a lower level, it has never been deemed advisable to bore further as a mere matter of curiosity.

QUALITY OF THE SALT.

The following analysis of the salt, made at different times over a period of ten or twelve years, will give a better idea of the purity of this remarkable deposit than any description:

Analysis made by Goessmann.

	Per cent.
Chloride of sodium	98.88
Chloride of calcium	Trace.
Chloride of magnesium	Trace.
Sulphate of lime	0.79
Water	0.33

WORKING THE MINE.

Shortly after the late war, a company was formed to work the mine. A shaft was sunk and some work done, but the enterprise was abandoned in a short time and lay idle until 1878, when another company was formed to carry on the work, but, finding that a much larger capital was required to put it on a successful footing than they had anticipated, they in turn, after a very short trial, retired in favor of a company of New York capitalists, who are now mining the salt and pushing the work vigorously. They have put in a large quantity of the most modern machinery, dug canals, built and chartered steamships and vessels, and lately have completed a railroad to the mine, which places them in direct communication with the entire railroad system of the United States and permits shipment from the mine to any point without breaking bulk. The salt from this mine is marketed principally in Galveston, New Orleans, and Mobile, for the Southern States, but large quantities are also shipped to the western meat packers in Kansas City, Saint Louis, Chicago, &c., and its sale is being pushed wherever a market can be found.

THE MANNER OF MINING.

The manner of mining is by driving galleries, or rather tunnels, into the solid rock, and these galleries are crossed at right angles by others. The width of the workings averages about 35 feet, and the height 65 to

70 feet. The roof consists of 50 feet of solid salt left for that purpose, and is supported by pillars 35 to 40 feet square. The salt is blasted out with dynamite, and the bore or blast holes are made by hand power with a drilling machine, somewhat on the principle of a carpenter's auger; two men working one machine can easily average 60 feet of boring per day.

The miners are almost all Germans from the salt mines of Strassfurt. They earn, on an average, $3 per day, and the laborers who load the cars and forward them to the foot of the shaft, about $1.75. The work is quite healthy, there being no noxious gases or water to interfere with the men; the temperature is also pleasant and equable the year round.

MANUFACTURE OF THE SALT FOR MARKET.

After the salt is mined, it is hoisted to a platform, some 60 feet above the ground, to the crushing machine, where it is reduced to a suitable size for the mills on a still lower level. The mills are the ordinary underrunning French burrstone mills, in common use throughout the country for grinding grain. They are 36 inches in diameter and run at the rate of three hundred to three hundred and fifty revolutions; will manufacture ninety sacks of 200 pounds per hour, of a grade corresponding to Liverpool coarse salt. From the mills the salt is run into the sacks or barrels ready for market and loaded directly on the railroad cars. The whole thing is more quickly done than described. It is perfectly possible that a piece of salt may be lying in the solid mass in the position it has occupied for ages, be blasted out, hoisted, crushed, sacked, and be loaded in the cars en route for market in ten minutes.

The salt is manufactured into any size or grade the market demands, from table salt as fine as flour, up to lumps of solid rock as large as can be conveniently handled for farmers' use. It will be seen that the manufacture is mechanical, no chemicals being used; the only precaution necessary to produce a beautiful white article being care and cleanliness in handling. The works are now producing 200 to 210 tons per day, and machinery is being erected to double this capacity.

GENERAL REMARKS.

The great strength and purity of this salt, the absence of lime and sulphur, renders it particularly adapted to the preservation of meats. It has had careful and extended tests by a number of the largest packers of the North and West, who are now the best customers of this company. The outlets for this salt to the markets of the country are by sea to the ports on the Gulf of Mexico, by inland, bay, and river routes via Atchafalaya River to the Mississippi, or by rail via Morgan, Louisiana and Texas Railroad to a connection with the entire railroad system of the United States, viz: At Vermillionville, with the Huntington system for Texas and the Southwest; at Alexandria, with the Gould system

for Northern Texas and the whole Northwest, including Chicago; and at New Orleans, with the various railroads from that point. The cars are loaded either in bulk or in packages (sacks or barrels) direct from the mills, and the shipment thus reaches the consumer without rehandling or breaking bulk in transit.

No thorough or systematic geological examination of Southwestern Louisiana has ever been made, and no very satisfactory explanation of the presence of this mass of salt, apparently adventitious, has been given. The most plausible theory seems to be that it was formed in a pond or basin by salt springs from a great depth, and that the stratification or bands previously referred to, resembling the rings in the trunk of a tree, and averaging 3 or 4 inches in width, are to be accounted for by the periods of greater or less activity of the springs, or the greater or less evaporation, according to the season. The same appearances might favor an annual overflow of a similar basin by the sea. But the absence of the other salts, &c., found in sea water favors the first theory.

At a comparatively recent (geological) date this salt must have been uncovered, as the surface of the rock is everywhere as smooth as a pavement, evidently polished by the action of water, and the direction of the stream is plainly indicated by the ridges and hollows on its surface. The present surface soil and sand seem due to an overwhelming inundation from the northeast. The direction of the Mississippi River, which is shown by the general direction of the valleys on the island, being from northeast to southwest, and from the additional fact that in dredging a canal about 4 miles south of the salt mine, through the sea marsh, a buried forest of cypress was struck at a depth of 8 to 10 feet, of which there was not the slightest indication on the surface. The trees were in a fair state of preservation, and all lay with their tops to the southwest.

The bones of the mastodon and other extinct animals are found in a layer of sand and gravel directly on the surface, and are almost unchanged in structure. In sinking an air shaft within the past few weeks the salt was struck at a depth of 19 to 20 feet. At about 10 feet below the surface a layer of rich black soil 5 feet thick was found in which were imbedded large quantities of fragments of earthenware, and below that, touching the salt, well preserved bones of a large animal, one section of the vertebra having an opening for the spinal cord of at least 2 inches in diameter.

Respectfully, yours,

E. E. RAPLEY,
Special Agent.